

December 2002

02-8

\*\*\*\*\*

The next meeting of the London Chapter will be Thursday January 9, 2002. The speaker will be Dr. Kelly Olson of the Classical Studies Department, University of Western Ontario. Come and hear what promises to be a very entertaining presentation on the archaeology of Roman plumbing (!!) entitled: ***Roman Sewage and Social Relations.***

We are looking for speakers for next month's Members Speaker Night. So far Chris Ellis and Holly Martelle have agreed to present pithy summaries of current projects. Contact Chris Ellis if you have something you want to say. Each presentation need be no longer than 10 minutes.

\*\*\*\*\*

As always, our meeting will be held at 8 pm at the London Museum of Archaeology, 1600 Attawandaron Road, near the corner of Wonderland & Fanshawe Park Road, in the northwest part of the city.

## Chapter Executive

### President

Jim Keron (285-2379)  
R.R. #@ Thamesford N0M 2M0  
Jkeron@alumni.uwaterloo.ca

### Secretary

Lorelyn Giese (495-9695)  
19 Saunby, London On N6G 1B6

### Vice-President

Paul O'Neal  
1376 Sunningdale Road E

### Treasurer

Chris Ellis (858-9852)  
515-1510 Richmond St. N N6G 4V2

### Directors

Kristy Snarey  
439 Griffith Stree, London On N6K 2S3

### Editors

Christopher Ellis (858-9852)  
cjellis@julian.uwo.ca  
Christine Dodd (434-8853)  
dpoulton@webgate.net

### ANNUAL RATES

Individual.....	\$18.00
Student.....	\$15.00
Institutional.....	\$21.00
Subscriber.....	\$20.00

# THE FREGG SITE (AHGX-390)

## A SMALL POINT ARCHAIC OCCUPATION IN ANCASTER, ONTARIO

Jim Wilson, Archaeologix Inc.

The Fregg site (AhGx-390) was located in 1995 by Ministry of Transportation staff archaeologists as part of the archaeological assessment for new Highway 6, between existing Highway 6 and Highway 53 (Hagerty and Murphy 1996:48). The site is located on Lot 45, Concession 4, Geographic Township of Ancaster, R. M. of Hamilton/Wentworth, Ontario. The Fregg site was subject to extensive Stage 3 testing by Mayer Heritage Consultants in the fall of 1997 (MHCI 1997). The test excavations revealed that the site consisted of two separate loci, each of which appeared to relate to a Small Point Archaic occupation (3500-2900 B.P.). Based on the results of the test excavations, it was recommended that the site be subject to additional Stage 4 excavation in advance of construction. This report describes the methods and results of the Stage 4 investigations carried out at the Fregg site during the 2001 field season.

### HISTORY OF INVESTIGATIONS

The 1997 testing conducted by Mayer Heritage Consultants Inc. involved the excavation of 67 one-metre test units. In total 1023 artifacts were recovered, including two projectile points, five bifaces, three utilized flakes and 1013 pieces of chipping detritus (MHCI 1997). As a result of the test excavations it was possible to determine that the site actually consisted of two loci separated by an intervening 20-metre area of low artifact density.

Locus "A", the easternmost artifact concentration, was found to extend over an area measuring eight metres east/west by fifteen metres north/south. One Innes-like projectile was recovered, and approximately 80% of the chipping detritus from this portion of the site was Haldimand chert. Locus "B", located approximately twenty metres to the west, was found to be slightly larger, extending 25 metres north/south by 10 metres east/west. One Ace-of-Spades-like projectile point base was recovered, and approximately 98% of the chipping detritus and all but one of the lithic tools were Onondaga chert.

### SITE LOCATION & ENVIRONMENT

The Fregg site is situated along the northern limit of the Haldimand Clay Plain physiographic region (Chapman & Putnam 1984:156-159). The northern part of the clay plain has been described by Chapman and Putnam:

*Although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.*

*Chapman and Putnam, 1984:156*

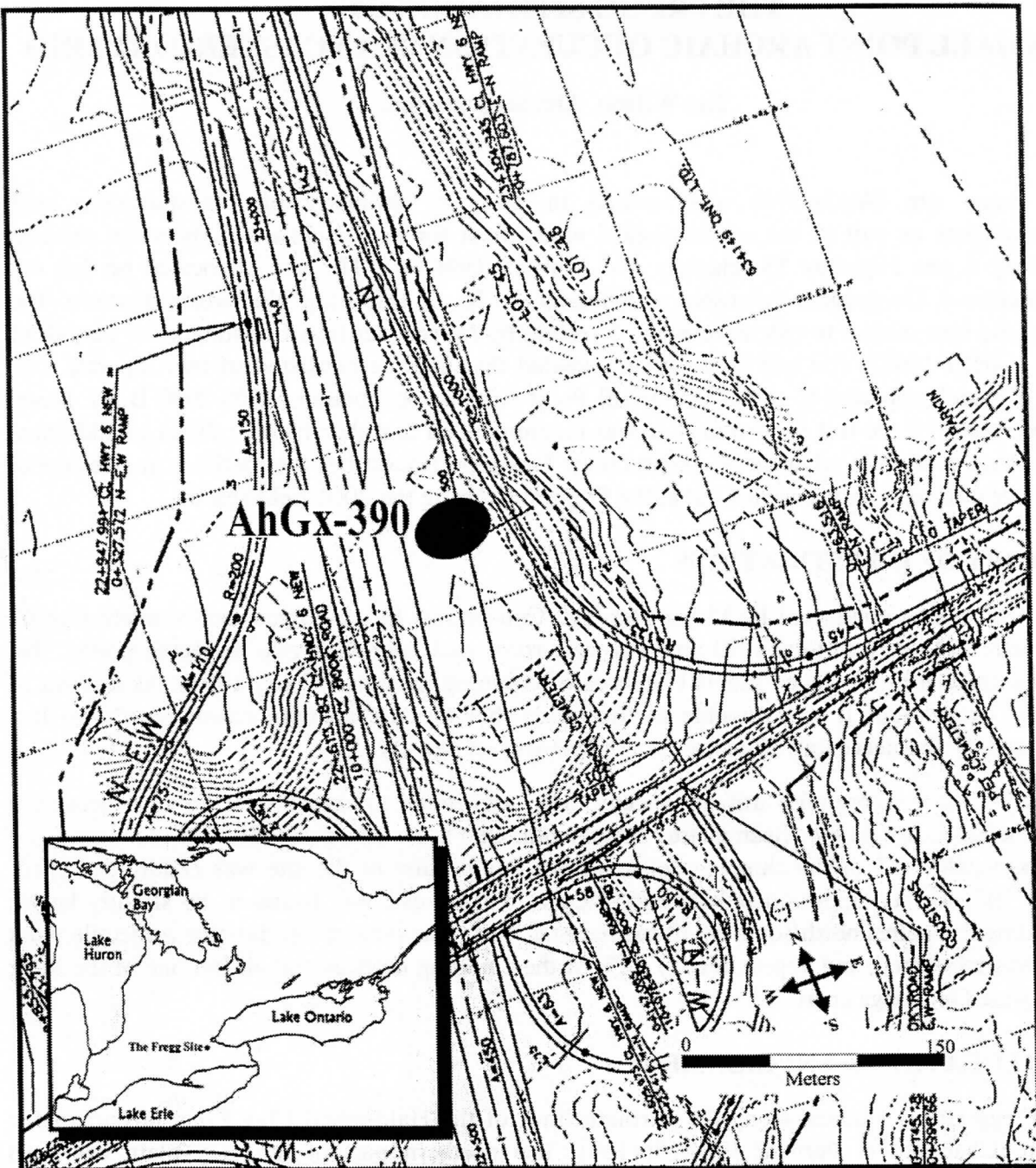


Figure 1. Location of the Fregg Site

While the Fregg site lies within the limits of the clay plain, it is located on a large pocket of Springvale Sandy Loam, a well drained, stone free, gray-brown podzolic, originating from sand over outwash gravels (Canada Department of Agriculture 1967). The local land use for this soil type has been potato farming, and as a consequence the site has been subject to extensive and deep ploughing.

Immediately to the east of the Fregg site there is a steep gully occupied by a small, unnamed tributary of the Welland River. The Welland River drains to the southeast, with its embouchure with the Niagara River located south of Niagara Falls. Just a kilometer to the north of the site the drainage flows toward Lake Ontario, via Ancaster Creek, and only a kilometer west the drainage is to Lake Erie, via the Grand River system. Thus the Fregg site lies on a height of land at the head of three major drainage systems.

The closest pollen percentage diagram comes from Hams Lake, four kilometers north of Paris and thirty kilometers west of the Fregg site (Bennett 1987: 1793). It indicates that the local forests circa 3500 B.P. were dominated by oak, beech and maple, with lesser amounts of elm, ash, pine, hickory birch, ironwood and hemlock. This is a pattern similar to the modern composition of the forest in this area, although evidence suggests that mean annual temperature for southern Ontario may have been as much as two degrees higher circa 3500 B.P., with slightly more rainfall (Woodley 1990:4).

## **METHODS**

The general site area was re-identified based on the field notes and report produced from the 1997 Mayer Heritage Consultant Inc. investigation (MHCI 1997). Unfortunately, at some point since the 1997 Stage 3 investigations, Mr. Jerome, the tenant farmer, removed the “permanent” datum stakes. As a result, the grid was re-established based on measurements provided from the 1997 field notes, as well as the recollections of Mr. Jim Wilson, who was the field director at that time, and Mr. Brent Wimmer who was one of the field assistants. We are confident that the re-established grid is with one-metre (east-west) and two-metres (north-south) of the 1997 grid, however it is unlikely that the two grids are precisely aligned.

After a new datum was established, a five-metre grid was established over Locus “A” and “B”. The five-metre units were referred to by the intersection coordinates of their southwest corner. Each five-metre square was divided into 25 one-metre units, with sub-square number one located in the southwest corner of the five-metre unit, number five in the southeast corner, number six located immediately north of number one, and so on.

In total, 300 one-metre units were excavated as part of the Stage 4 assessment, including 54 at Locus “A” and 246 at Locus “B”. All soil was screened through 6.0-millimeter mesh hardware cloth and each square was excavated to the subsoil, with the unit floor “shovel shined” in an attempt to define any posts or features. All artifacts were bagged according to one-metre provenience unit for later laboratory washing and cataloguing. One unit located near the heart of Locus “B” (275E-585N:22) was screened with 3.0 millimeter hardware cloth in order to gain a sample of smaller material that might not be recovered with the 6.0 millimeter mesh.

## **RESULTS**

In total, the excavation of the additional 300 one-metre squares resulted in the recovery of 4270 artifacts; including 4201 pieces of chipping detritus, 53 utilized flakes, two scrapers, 10 biface fragments, three projectile points, and two small cores.

The frequency of artifact recovery per one-metre unit varied considerably across the site, and was consistent with identification of two discrete loci or areas of activity as indicated by the Mayer



Heritage Consultants investigations conducted in 1997. As such, it was determined that it would be best to present the results for each locus separately, in order to permit comparison between the two loci and with other reported Small Point sites.

### **Locus "A"**

Locus "A", the easternmost of the two artifact concentrations was determined to be approximately fifteen metres long (N/S) by eight metres wide (E/W). The longitudinal axis of the site has almost certainly been lengthened by the intensive use of the site area for potato farming, which requires deep ploughing. As will be demonstrated below, Locus "A" differs from Locus "B" in size, number of formal lithic tools and the primary source of the raw material used for the production of lithic tools.

The Stage 3 investigations conducted by MHCI in 1997 had resulted in the recovery of one Haldimand chert projectile point, three biface fragments (2 Haldimand chert and 1 Onondaga chert), two utilized flakes (1 Haldimand and 1 Onondaga), and 365 pieces of chipping detritus (80.8% Haldimand, 18.9% Onondaga, and 0.3% Kettle Point). The projectile point was identified as an Innes point, a Late Archaic "Small Point" type (3500-3100 B.P.).

The Stage 4 excavations of 54 additional one-metre units resulted in the recovery six utilized flakes, one biface fragment and 409 pieces of chipping detritus. Because of the problems associated in re-aligning the 1997 and 2001 excavation grids, the units excavated at the center of the locus in 1997 were re-excavated in 2001.

### ***Bifacial Tools***

The only bifacial tool recovered during the 2001 excavations consists of a small, finely worked tip, probably from a projectile point (Figure 4: 2). Combined with the 1997 data, the entire formal lithic tool assemblage from locus "A" consists of only one projectile point and four biface fragments, all but one of which were manufactured from Haldimand chert. The projectile is somewhat asymmetric in shape and may actually have been a knife (Figure 4:1). It is biconvex in cross-section and measured 38.6 millimeters long, 23.1 millimeters wide and 7.8 millimeters thick. Haldimand chert is a relatively high quality raw material that outcrops along the Bois Blanc formation between Kohler and Hagersville, as well as in the Cayuga area approximately 35 kilometers south-southwest of the Fregg site (Parker 1986: 52-60). The three bifaces recovered during 1997 were thin, well manufactured tips, likely from finished projectile points (Figure 4: 3-5).

### ***Utilized Flakes, Cores and Chipping Detritus***

Totaling the 1997 and 2001 excavations, seven utilized flakes and 774 pieces of chipping detritus were recovered.

All six utilized flakes recovered during the 2001 field season were Haldimand chert, while the solitary example identified by MHCI was Onondaga chert. According to the classification system devised by Fisher, four of the flakes were general type, one blade type and one lateral type (Fisher 1997: 38-40).

**Table 1: Locus “A” Utilized Flake Metrics, Morphology & Chert Types**

<i>Provenience</i>	<i>Cat. #</i>	<i>Chert Type</i>	<i>Length</i>	<i>Width</i>	<i>Thick</i>	<i>Category</i>
300E 570N:21	1013	Haldimand	25	13	4.5	General
300E 570N:12	1017	Haldimand	27.5	17.5	6.5	General
300E 580N:2	1022	Haldimand	30	18	3	General
300E 570N:11	1024	Haldimand	43	20	6	General
300E 570N:17	1028	Haldimand	24	9.5	2.5	Blade
300E 570N:7	1050	Haldimand	15	13.5	3.5	Lateral
290E-590N:1	525	Onondaga	26.3	17.2	3.3	Lateral
		<b>AVERAGE</b>	<b>27.3</b>	<b>15.5</b>	<b>4.2</b>	
		<b>ST. DEV.</b>	<b>8.4</b>	<b>3.6</b>	<b>1.5</b>	

The flake assemblage was subject to morphological analysis following the classification scheme described by Lennox *et al* (1986), with the exception that no attempt was made to distinguish “primary” and “primary bipolar” flakes. The results are presented in Table 1. All chert type identifications were accomplished visually with reference to materials located in the Ministry of Tourism, Culture and Recreation collections in London.

**Table 2: Locus “A” Flake Morphology and Chert Type (1997 & 2001 Data)**

<b>Chert</b>	<b>Primary</b>		<b>Secondary</b>		<b>Broken</b>		<b>Shatter</b>		<b>Micro Flake</b>		<b>Total</b>	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	% of Tot.
Haldimand	189	32.1	200	34	190	32.3	9	1.5	0	0	<b>588</b>	<b>75.9</b>
Onondaga	22	12.9	106	62.4	39	22.9	2	1.2	1	0.6	<b>170</b>	<b>21.9</b>
Heat Alt.	0	0	12	80	3	20	0	0	0	0	<b>15</b>	<b>1.9</b>
Kettle Pt.	0	0	1	100	0	0	0	0	0	0	<b>1</b>	<b>0.1</b>
<b>TOTAL</b>	<b>211</b>	<b>27.3</b>	<b>319</b>	<b>41.2</b>	<b>232</b>	<b>30</b>	<b>11</b>	<b>1.4</b>	<b>1</b>	<b>0.1</b>	<b>774</b>	<b>99.8</b>

Haldimand chert dominates the chipping debitage assemblage, comprising 75.9% of the total Locus “A” sample. Onondaga chert was the second most common chert type (21.9%), with 1.9% of the assemblage being heat altered and one secondary flake of Kettle Point chert also recovered (0.1%). Viewing the collection as a whole, secondary and broken flakes comprise 71.2% of the sample, suggesting that the majority of the primary tool reduction occurred elsewhere, with the resharpening and/or finishing of formal tools from prepared blanks comprising the bulk of the lithic production activities occurring at the site. It is interesting to note that there were significantly more Haldimand primary flakes in relation to the total Haldimand sample (N=189, 32.1%), than there were Onondaga primary flakes in relation to the Onondaga sample (N=22, 12.9%). This may suggest that some Haldimand chert was making its way to the site in the form of small cores. However, no cores or hammerstones were recovered from Locus “A”, so it is difficult to evaluate the significance of this pattern.

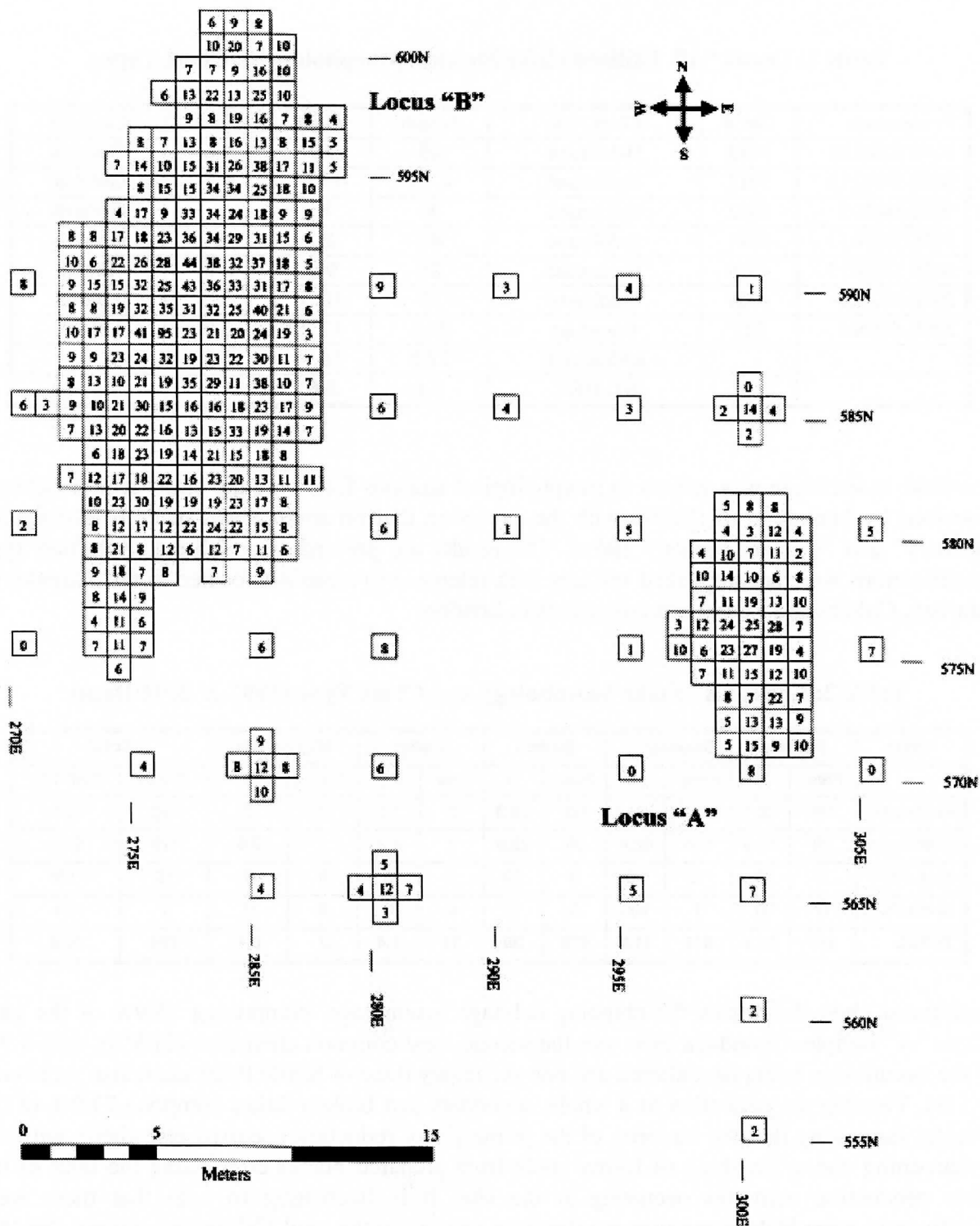


Figure 2: Distribution of Chipping Detritus.

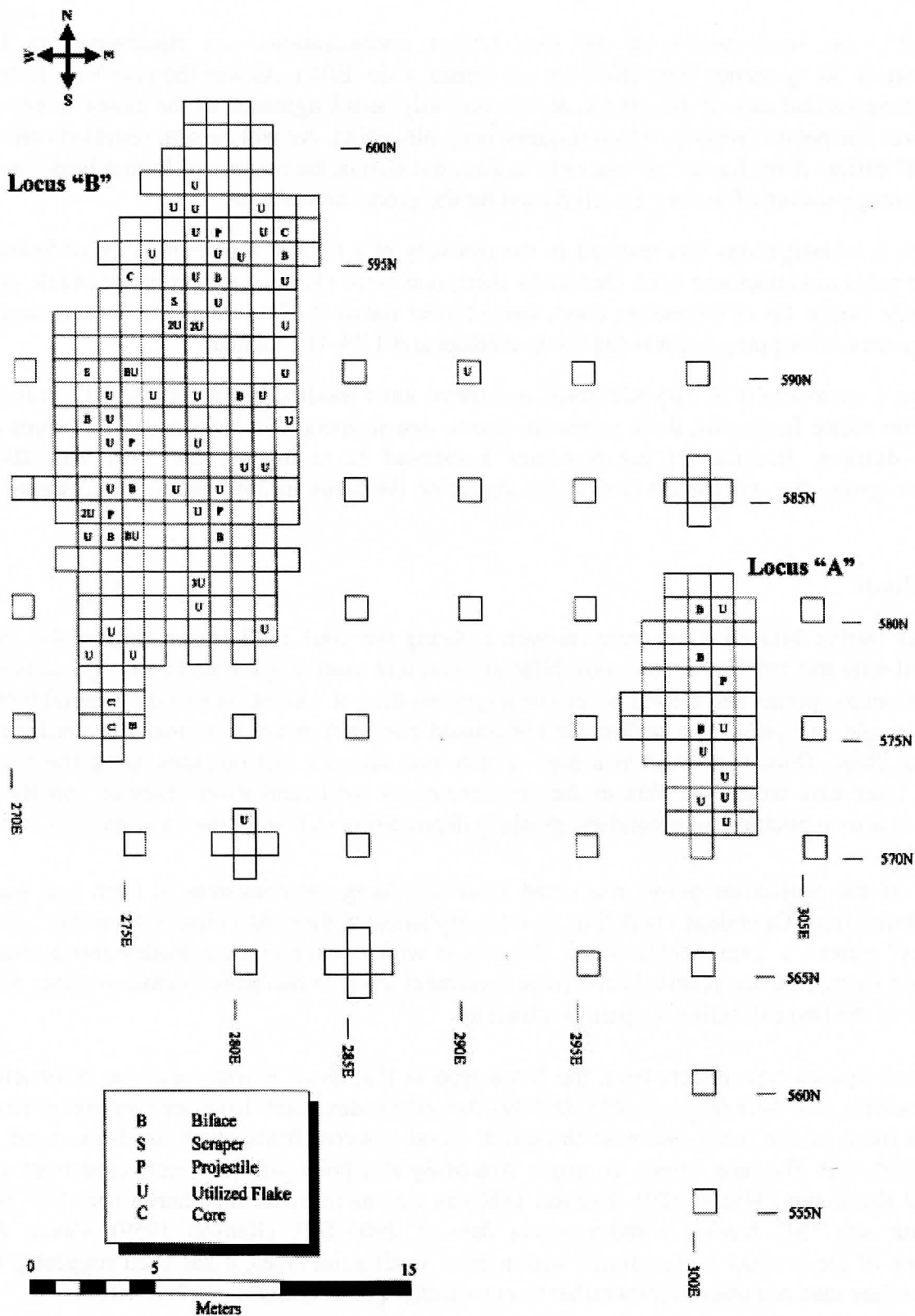


Figure 3: Distribution of Tools.



## Locus "B"

Locus "B", the westernmost of the two artifact concentrations was determined to be approximately 30 by metres long (N/S) by ten metres wide (E/W). As was the case with Locus "A", the longitudinal axis of the site has almost certainly been lengthened by the intensive use of the site area for potato farming, which requires deep ploughing. As will be demonstrated below, Locus "B" differs from Locus "A" not only in size, but also in the number of formal lithic tools and the primary source of the raw material used for the production of tools.

The Stage 3 investigations had resulted in the recovery of a base of a probable Ace-of-Spades projectile point manufactured from Onondaga chert, one crude Onondaga chert biface blank, one finely made biface tip of Onondaga chert, two utilized flakes (1 Haldimand and 1 Onondaga), and 648 pieces of chipping detritus (98.3% Onondaga and 1.7% Haldimand).

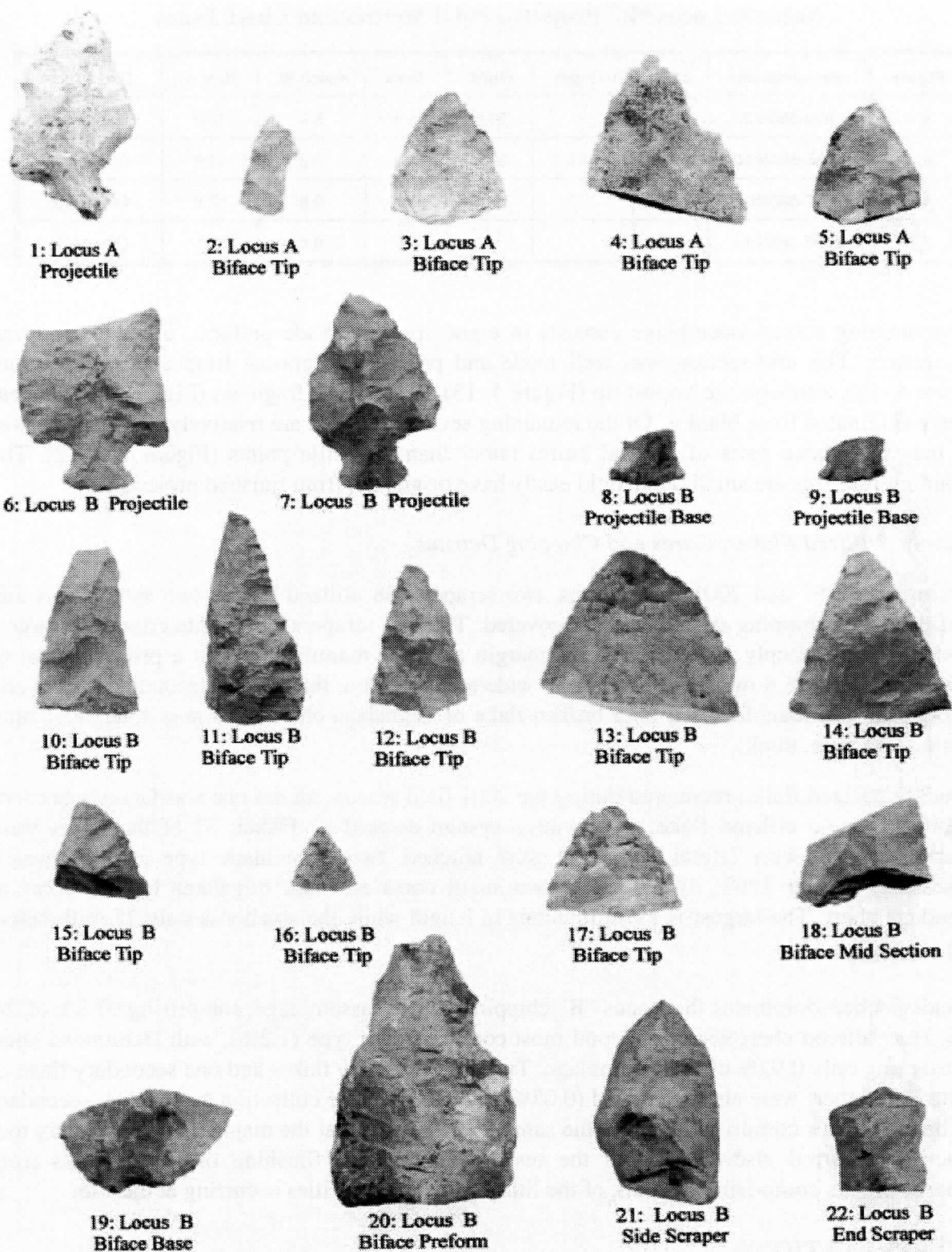
The Stage 4 excavations of 246 additional one-metre units resulted in the recovery 47 utilized flakes, nine biface fragments, three projectile points, two scrapers, two cores and 3792 pieces of chipping detritus. Because of the problems associated in re-aligning the 1997 and 2001 excavation grids, the units excavated at the center of the locus in 1997 were re-excavated in 2001.

### *Bifacial Tools*

A total of twelve bifacial tools were recovered during the 2001 field season (Figure 4:6-19). Combined with the 1997 data, the entire bifacial lithic tool assemblage from Locus "B" consists of four projectile points and eleven bifaces or fragments thereof. All but one of the bifacial tools, with the single exception of a well-made Haldimand chert biface tip, were manufactured from Onondaga chert. Onondaga chert is a high quality raw material that outcrops along the north shore of Lake Erie from Fort Erie to the embouchure of the Grand River (Eley & von Bitter 1989). It is also available as a secondary, glacially deposited source as far west as Chatham.

All four of the projectiles points recovered from the Fregg are consistent in form and were manufactured from Onondaga chert (Fig. 4: 6-9). Stylistically, they most closely resemble "Ace-of-Spades" points, a Late Archaic Small Point type with relatively broad blades and a short, constricted stem. The two relatively complete specimens are both biconvex in cross-section, with the larger of the two exhibiting a tip impact fracture.

The Ace-of-Spades type differs from the Innes type in that blade is wider and the constricted stem somewhat narrower (Ellis *et al* 1990: 109). Ace-of-Spades points have been recovered from the north locus of the Innes site near Brantford, wood charcoal from which has been dated to 3350 +/-195 B.P. (Lennox 1986). A single Ace-of-Spades point was also recovered from the Crawford Knoll site (3480+/-120) (Kenyon 1980) as well as from the Inverhuron sites "R" and "M", with site "M" having a radio-carbon date of 2900 B.P. (Kenyon 1959). Given the occurrence of these wider bladed forms with narrow small point types, it has been suggested by some that they may represent knives rather than projectile points (Ellis *et al* 1990: 109).



**Figure 4: Stone Tools.**

**Table 3: Locus “B” Projectile Point Metrics and Chert Types**

Figure	Provenience	Cat. #	Length	Width	Thick	Notch W.	Stem W	Chert Type
4: 1	275E-580N:25	1054	-	26.6	6.3	9.9	13.2	Onondaga
4: 2	275E-595N:10	1273	37.6	22.2	7.2	9.3	11.9	Onondaga
4: 3	270E-580N:25	1093	-	-	-	9.8	13.8	Onondaga
4:4	275E-585N:11	602	-	-	-	9.6	11.7	Onondaga

The remaining biface assemblage consists of eight tips, one crude preform, one base and one mid-section. The mid-section was well made and probably originates from a projectile point (Figure 4: 18), although the largest tip (Figure 4: 13) and the base fragment (Figure 4: 19) appear to have originated from blanks. Of the remaining seven tips, three are relatively long and narrow, and may have been parts of bifacial knives rather than projectile points (Figure 4:10-12). The remaining four tips are small, and could easily have originated from finished projectiles.

#### *Scrapers, Utilized Flakes, Cores and Chipping Detritus*

Totaling the 1997 and 2001 excavations, two scrapers, 48 utilized flakes, two small cores and 4440 pieces of chipping detritus were recovered. The two scrapers were quite crude, the largest of which has a steeply retouched lateral margin and was manufactured on a primary flake of Onondaga chert (38.8 mm. long, 22.1 mm. wide and 11.1 mm. thick). The second is a small end scraper that was manufactured on a broken flake of Onondaga chert (20.8 mm. long, 17.1 mm. wide and 66. mm. thick).

Of the 47 utilized flakes recovered during the 2001 field season, all but one was Onondaga chert. According to the utilized flake classification system devised by Fisher, 37 of the flakes were general type, 12 were lateral type, five were notched, two were blade type and one was a spokeshave (Fisher 1997: 38-40). The two small cores are both ridge/area bipolar cores of Onondaga chert. The largest is 39 millimeters in length while the smaller is only 25 millimeters long.

Onondaga chert dominates the Locus “B” chipping detritus assemblage, comprising 97.8% of the total. Heat altered chert was the second most common chert type (1.2%), with Haldimand chert representing only 0.92% of the assemblage. Two small primary flakes and one secondary flake of Kettle Point chert were also recovered (0.08%). Considering the collection as a whole, secondary and broken flakes comprise 70.1% of the sample, suggesting that the majority of the primary tool reduction occurred elsewhere, with the resharpening and/or finishing of formal tools from prepared blanks comprising the bulk of the lithic reduction activities occurring at the site.

## **INTERPRETATIONS**

Based on the nature of the artifact assemblages, both loci can be interpreted as Late Archaic Small Point camps. The recovery of the Innes-like projectile point from Locus “A” and the four Ace-of-Spades points from Locus “B” is consistent with this temporal placement. Sites of similar

Table 4: Locus “B” Utilized Flake Metrics, Morphology & Chert Types

<i>Provenience</i>	<i>Cat. #</i>	<i>Chert Type</i>	<i>Length</i>	<i>Width</i>	<i>Thick</i>	<i>Category</i>
275E 580N:4	1083	Onondaga	40	20	7.5	Blade
280E 585N:22	1153	Onondaga	18.5	10.5	4	Blade
275E 585N:24	1130	Haldimand	40	28	5.5	General
270E 575N:25	1036	Onondaga	32	25.5	6.5	General
275E 585N:14	1080	Onondaga	25	19	5.5	General
270E 580N:24	1087	Onondaga	26	24.5	4	General
275E 580N:16	1090	Onondaga	43	30.5	10	General
275E 580N:24	1098	Onondaga	22	13	5	General
275E 580N:9	1102	Onondaga	24.5	16	5	General
270E 585N:20	1137	Onondaga	32	26.5	9.5	General
275E 590N:1	1150	Onondaga	33.5	31	5	General
275E 590N:13	1157	Onondaga	21	13	4.5	General
270E 585N:25	1166	Onondaga	23	20.5	3.5	General
275E590N:14	1200	Onondaga	50	23	13	General
275E590N:14	1200	Onondaga	19	10	2.5	General
275E590N:20	1205	Onondaga	35	22	3	General
280E595N:12	1222	Onondaga	26.5	16	5	General
275E595N:19	1229	Onondaga	22.5	12	3.5	General
275E595N:13	1244	Onondaga	38	30	8	General
275E575N:16	1255	Onondaga	24	17	10.5	General
280E595N:7	1272	Onondaga	35	23	7	General
275E595N:9	1276	Onondaga	20	16	3.5	General
275E595N:2	1279	Onondaga	21.5	15	3	General
275E590N:24	1292	Onondaga	29	24	12.5	General
280E595N:1	1308	Onondaga	27	15.5	4	General
280E590N:23	1311	Onondaga	24	16	4	General
280E575N:22	1313	Onondaga	18	17	5	General
285E565N:6	1317	Onondaga	21.5	20.5	4	General
270E 580N:19	1401	Onondaga	21.5	17	4	General
270E 575 N:19	1033	Onondaga	30	16.5	4.5	Lateral
270E 575N:5	1040	Onondaga	21.5	15	2.5	Lateral
280E 585N:6	1064	Onondaga	18	17.5	4.5	Lateral
275E 585N:5	1076	Onondaga	23	19	5.5	Lateral
275E 580N:9	1102	Onondaga	22.5	17	2.5	Lateral
275E 580N:9	1102	Onondaga	28	18	3.5	Lateral
270E 585N:15	1123	Onondaga	27.5	23	7	Lateral
275E 585N:22	1168	Onondaga	27.5	24	5	Lateral
280E585N:7	1197	Onondaga	17	13	2	Lateral
280E590N:13	1201	Onondaga	22.5	15	2.5	Lateral
275E595N:14	1258	Onondaga	19.5	17	3	Lateral
270E 585N:5	1402	Onondaga	22.5	19.5	3.5	Lateral
270E 580N:24	1087	Onondaga	18.5	13	3.5	Notch
275E 590N:13	1157	Onondaga	25	21	4.5	Notch
280E585N:18	1213	Onondaga	30	22	7.5	Notch
275E595N:5	1304	Onondaga	42	20	11.5	Notch
270E 575N:10	1400	Onondaga	31	18.5	6.5	Notch
280E590N:3	1211	Onondaga	37	18	8	Spokeshave
		<b>AVERAGE</b>	<b>27.1</b>	<b>19.1</b>	<b>5.4</b>	
		<b>ST. DEV.</b>	<b>7.7</b>	<b>5.1</b>	<b>2.7</b>	



age in southern Ontario include Crawford Knoll (I. Kenyon 1980), Knechtel I (Wright 1972), Inverhuron (W. Kenyon 1959), Rocky Ridge (Ramsden n.d.), Innes (Lennox 1986), Welke-Tonkonoh (Muller 1989) and Thistle Hill (Woodley 1990). Radiocarbon dates from these sites suggest an approximate date of 3500 to 2700 B.P. for the Small Point Late Archaic (Muller 1989).

**Table 5: Locus “B” Flake Morphology and Chert Type (1997 & 2001 Data)**

Chert	Primary		Secondary		Broken		Shatter		Micro Flake		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	% of Tot.
Onondaga	422	9.7	1206	27.8	1895	43.6	522	12	299	6.9	<b>4345</b>	<b>97.8</b>
Heat Alt.	2	3.9	9	17.6	23	45.1	13	25.4	4	7.8	<b>51</b>	<b>1.2</b>
Haldimand	8	19.5	12	29.2	15	36.5	4	9.7	2	4.9	<b>41</b>	<b>0.92</b>
Kettle Pt.	2	66.6	1	33.3	0	0	0	0	0	0	<b>3</b>	<b>0.08</b>
<b>TOTAL</b>	<b>434</b>	<b>9.7</b>	<b>1228</b>	<b>27.6</b>	<b>1933</b>	<b>43.5</b>	<b>539</b>	<b>12.1</b>	<b>305</b>	<b>6.7</b>	<b>4440</b>	<b>100</b>

The majority of Small Point Archaic sites so far identified in southwestern Ontario are located in proximity to lakeshores (e.g. Crawford Knoll, Knechtel I, Inverhuron, Rocky Ridge). A few sites, Innes and Welke-Tonkonoh being notable examples, are located in the interior. Based on this pattern of site locations and demonstrable differences in tool kits, researchers have argued for at least two distinct Small Point Archaic site types: 1) a lakeshore camp (represented by Inverhuron, Crawford Knoll, Knechtel I, Rocky Ridge); and 2) an interior winter campsite (represented by Innes and Welke-Tonkonoh). In this model it is hypothesized that Late Archaic populations traveled inland to the interior during cold months, where they centered their activities on deer hunting and hide working. In the warmer seasons, groups moved to lakeshore environments where there was a concentration on aquatic mammal and bird hunting and fishing (Muller 1989; Lennox 1986; Ellis et al. 1990). This interpretation stems from the unique nature of the tool kits recovered from each of these site types. Interior sites usually possess a high frequency of projectile points and scrapers and lack fishing apparatus and groundstone items (axes, adzes, celts). These latter tool types are characteristic of warm weather lakeshore occupations that possess a lower frequency of projectile points and scraping implements.

More recently Martelle, in her report on the Sunnydale site excavations in north London, has documented an “interior” Small Point Archaic site at which there is a relative absence of scraping tools and a high proportion of groundstone items (Martelle 2001). Interestingly groundstone items are completely absent from both the Innes and Welke-Tonkonoh sites. In light of these findings she suggests that at least one of the activities carried out at the Sunnydale site may have centered on some sort of woodworking, such as canoe manufacture. She also points out that there is no clear evidence of seasonality, and is unwilling to assign the site to the “winter” category based solely on its location away from a lakeshore.

Woodley has most strongly called into question the summer lakeshore/winter interior model (1990). Based on his investigations at the Thistle Hill site just south of Hamilton, he has suggested the local environment was sufficiently replete that it could have supported occupation by a small social unit during any season (1990:33-38). Woodley concludes “there is enough

variation in preferred settlement location for the Late Archaic that some inland sites may represent part of a year-round settlement and subsistence adaptation oriented towards inland creeks, streams and rivers” (1990:50).

Considering the Fregg site data more closely, while the cultural material from both Locus “A” and “B” are Small Point Archaic in origin, there is a strong possibility that they may represent the remains of separate occupations, resulting from the reuse of the same general area on two or more occasions. The fact that Onondaga chert dominates the lithic assemblage at Locus “B”, while Haldimand chert comprises approximately 75% of the Locus “A” assemblage, strongly suggests that the two loci are not contemporaneous. Alternatively, the two discrete clusters of cultural material may have resulted from the contemporaneous occupation of the site by two social units, each of which had arrived at this location having replenished their lithic tool kit independently at separate raw material sources. This possibility is viewed as less likely than the two loci being temporally discrete.

There is very little evidence of primary reduction at either locus at the Fregg site. The majority of the chipping detritus is small in size and consists of secondary and broken flakes. It is likely that the occupants of both loci did much of their initial biface production at a primary chert outcrop, as Muller (1989) and Ellis and Spence (1997) suggest is typical of Late Archaic groups who extensively manufactured and utilized tool preforms. This practice allowed a finished tool to be produced with relatively little additional work at any point during the seasonal round.

The other obvious difference between the two loci is their physical extent. Locus “A” was quite small, extending over an area not much greater than 60 square metres, with a limited tool inventory consisting of one projectile, four biface tips and seven utilized flakes (Table 6). In comparison, Locus “B” extends over an area of at least 250 square metres, with four projectiles, 11 bifaces, 49 utilized flakes, two scrapers and two cores having been recovered. It is interesting that that Locus “A” is roughly one-quarter the size of Locus “B”, and that the artifact assemblage is also almost exactly one fourth that of its larger neighbour. It seems possible that Locus “A” may represent the remains from a typical single visit to the site, while Locus “B” could represent the remains from as many as four successive visits. Alternatively, Locus “B” may have only been occupied once, but for a longer period of time than Locus “A”, or by a larger group.

**Table 6: Fregg Site Assemblage, Locus Comparison**

Artifact Class	Locus A.	Locus B.
Chipping Detritus	774	4440
Utilized Flakes	49	7
Projectile Points	4	1
Other Bifacial Tools or Frags.	11	4
Scrapers	2	-
Cores	2	-

The possibility that Locus "B" represents a series of brief annual re-visitations rather than the result of a single episode, might be reasonably questioned given the homogeneous nature of the lithic assemblage, which was 97.8% Onondaga chert. However, if Locus "B" did comprise a discrete element in a group's seasonal round, and represents the remains of three or four successive visits, it is not entirely improbable that the assemblage could have remained dominated by a single chert type. In this scenario the group in question would have replenished their lithic tool supply at an Onondaga chert source sometime shortly before visiting the site, and not had a pressing need to acquire additional local materials, especially given the low quality of Ancaster chert.

If Locus "B" was occupied by the same group on more than one occasion, then this degree of lithic source homogeneity may provide some confirmatory evidence supporting the proposition that the loci do not represent a long term "hub" in the settlement/subsistence round. Anything more than a brief, task specific occupation in the Hamilton area would almost certainly have resulted in the opportunity for Ancaster chert to work its way into the assemblage. For instance at the nearby Thistle Hill site, interpreted by Woodley as having been utilized over the course of several seasons, Onondaga chert comprised approximately 75% of the debitage assemblage, with locally available Ancaster chert reaching close to 21% (Woodley 1990). Of the 35 bifacial tools recovered at Thistle Hill, 13 were Ancaster chert and 22 were Onondaga chert. It should also be noted that several tool types, such as drills, knives and rough stone chopping tools, not noted at Fregg, were recovered at Thistle Hill, as well as the presence of features (Woodley 1990: 16-18). The absence of features and fire-cracked rock at Fregg, as well as a limited lithic tool kit, is consistent with the expected remains from a short term, logistic camp.

The Innes site, located on the Highway 403 corridor approximately 40 kilometers west of the Fregg site, provides another interesting counter point. As was the case at the Fregg site, there are two separate loci and 99.5 % of the chipping detritus and virtually all of the formal tools were Onondaga chert (Lennox 1986). However, unlike Fregg, the occupations at the Innes appear to have been more substantial, including the presence of features, five drills, 22 scrapers, 39 bifaces including numerous bifacial blanks, 39 projectile points, and 10,405 pieces of chipping detritus (Lennox 1986:224-230). Lennox interprets the site as cold weather base camp occupied by two families, with a strong emphasis placed on hunting and hide working activities. The assemblage from Innes much more closely meets what might be expected from a general-purpose cold weather occupation, from which brief logistically oriented forays could have been mounted.

In conclusion, both loci at the Fregg site can be interpreted as briefly occupied, logistically oriented Small Point Archaic camps. While the possibility that the two loci were contemporaneous cannot be eliminated, it seems more likely based on the difference in lithic raw material acquisition patterns that they represent the remains from temporally discrete occupations. It is also possible that Locus "B" represents the remains from several brief occupation episodes.

The Fregg site loci differ from other reported interior Small Point Archaic sites mainly in their ephemeral nature. The tool kits at both loci are quite limited, and the over all number of formal artifacts and lithic debris is far less than sites such as Thistle Hill (Woodley 1990) or Innes (Lennox 1986). The loci could represent the residue from brief task specific stops in the seasonal round by a complete social unit, or possibly the remains from the activities conducted by task specific sub-groups sent out from more substantial "hub" occupations such as Innes and Thistle

Hill. As such, the Fregg loci provide data on a new, but not really unexpected type of interior site. Given the lack of faunal or floral material, a determination of seasonality cannot be made. However, based on the presence of hunting related tools and several broken projectile tips, it seems reasonable to conclude the camp was oriented towards the exploitation of deer or other game.

Small, artifact poor sites such as Fregg are seldom given much attention either by research archaeologists or cultural resource managers. While the site might at first glance seem somewhat disappointing in terms of its plough disturbed nature and sparse formal tool inventory, the opposite is actually true. Small Point Archaic sites are widely assumed to be common, however single component examples are far less frequently encountered, and formal reporting and publication has been spotty. As such the Fregg site provides important new data regarding Small Point Late Archaic tool kit organization, chert acquisition strategies and settlement subsistence patterns.

The best interpretation of the Fregg materials will emerge as additional sites are investigated in the Hamilton area. As the Small Point late Archaic data base expands across the rest of southern Ontario, it seems likely that regionally specific patterns of group movements and resource exploitation will emerge, some of which will certainly include significant littoral elements, while others may be primarily centered on the major drainage systems such as the Thames and the Grand. It is suggested here that the dominant summer lakeshore/winter interior model of Small Point Archaic settlement/subsistence is somewhat Frankensteinian in nature, having been crudely stitched together with sites from widely disparate areas with significantly different resource potentials. It is not surprising then, that as new data emerges, this model may be in need revision, or ultimately end up being restricted to smaller parts of southern Ontario where it has some explanatory efficacy.

### Acknowledgments

I would like to express my gratitude to Ms. Penny Young, Staff Archaeologist with the Ministry of Transportation, Central Region, as well as to Mr. Lee Jerome, of Jerome Brothers Potatoes, in Ancaster. The Stage 4 field work was ably directed by Mr. Arthur Figura, while the list of field and lab assistants included Holly Martelle, Adam Hossack, Kurt Kostick, John Sheen, Adam DeRuiter, Jason Scott, Andre Polski, Lindsay Ginter, Jackie Hoek, Mark Panko, Brianna Newton, and Brent Wimmer. Dr. Peter Timmins also graciously commented on an early draft this paper.

### REFERENCES CITED

- Bennett, K.D.  
 1987 Holocene history of forest trees in Southern Ontario. *Canadian Journal of Botany* 65: 1792-1801.
- Canada, Department of Agriculture  
 1967 *Soil Map of Wentworth County, Soil Survey Report No. 32.*
- Eley, Betty E. and von Bitter, Peter H.  
 1989 *Cherts of Southern Ontario*. Royal Ontario Museum, Toronto.



Ellis, Chris, Ian Kenyon and Michael Spence

- 1990 *The Archaic. In The Archaeology of Southern Ontario to A.D. 1650.* Occasional Publication of the London Chapter, OAS Number 5. Chris Ellis and Neal Ferris, eds., pp. 65-124. London: Ontario Archaeological Society.

Ellis, C. J., and M.W. Spence

- 1997 *Raw Material Variation and the Organization of Small Point Archaic Lithic Technologies in Southwestern Ontario.* In: *Pre-ceramic Southern Ontario*: P.J. Woodley & P. Ramsden eds., pp. 119-140. Occasional Papers in Northeastern Archaeology No. 9; Copetown Press.

Fisher, Jacqueline A.

- 1997 *The Adder Orchard Site: Lithic Technology and Spatial Organization in the Broadpoint Late Archaic.* Occasional Publications of the London Chapter, OAS, Number 3, 1997.

Kenyon, Ian

- 1980 *Crawford Knoll: An Archaic Site by the St. Clair River Delta.* Manuscript on file with the Ontario Ministry of Tourism, Culture and Recreation.
- 1989 *Terminal Archaic Projectile Points in Southwestern Ontario: An Exploratory Study.* *Kewa* 89(1):2-21.

Kenyon, W.A.

- 1959 *The Inverhuron Site, Bruce County, Ontario, 1957.* Royal Ontario Museum, Art and Archaeology Division, Occasional Paper 1.

Lennox, Paul A.

- 1986 *The Innes Site: A Plow-Disturbed Archaic Component, Brant County, Ontario.* *Midcontinental Journal of Archaeology* 11(2):221-268.

Lennox, P. A., C.F. Dodd and C.R. Murphy

- 1986 *The Wiacek Site: A Late Middleport Component in Simcoe County, Ontario.* Ontario Ministry of Transportation and Communications, Environmental Unit, Planning and Design Section, London, Ontario.

Martelle, Holly

- 2001 *The Sunnydale Site: AgHh-53, A Small Point Archaic Camp in North London.* *Kewa* 01-5: 1-13.

Mayer Heritage Consultants

- 1997 *Archaeological Assessments (Stages 1 to 3), MTO WP 09-00 and 20-91-00, Consultant Agreement 9720-7411-2497, Hwy. 6 (New) Between Highway 53 and Existing Hwy 6.,* Report on file with the Ministry of Transportation, Central Region.

Muller, Joseph

- 1989 *A "Smallpoint" Archaic Component at the Welke-Tonkonoh Site, Ontario.* *Kewa* 89(3):3-22.

Parker, Lawrence Ralph

- 1986 *Haldimand Chert and its utilization during the Early Holocene Period in Southwestern Ontario.* Masters thesis submitted to Trent University Department of Anthropology.

Ramsden, Peter

- n.d. *Rocky Ridge: A Stratified Archaic Site near Inverhuron, Ontario.* Ontario Ministry of Culture and Recreation, Historical Planning and Research Branch, Research Report 7.

Woodley, Phillip J.

- 1990 *The Thistle Hill Site and Late Archaic Adaptations.* Occasional Papers in Northeastern Archaeology No. 4. Copetown Press, Dundas, Ontario.

Wright, J.V.

- 1972 *The Knechtel I Site, Bruce County, Ontario.* *National Museum of Man, Archaeological Society of Canada, Mercury Series* 4.